

REMARKS

The Office Action indicated that the subject matter of Claim 2 would be allowed if rewritten in independent form. Accordingly, newly drafted Claim 5 represents the allowed subject matter of Claim 2 written in independent form.

The use of small gas-powered engines with a manual pull start rope is well known in numerous patents that have been issued in this relatively crowded field.

The economic demands, however, of providing both an efficient and economical pull start or recoil starter engine has companies competing to try and improve their competitive position in this field. The present invention attempts to provide a rope reel of a large enough size to reduce the pulling load on a recoil rope while at the same time improving the cooling of the engine and reducing both the size and weight of the recoil starter. Thus, the present invention as defined in our presently amended claims must be considered in view of this state of art.

Thus when differences that may appear technologically minor nonetheless have a practical impact, particularly in a crowded field, the decision-maker must consider the obviousness of the new structure in this light.

Continental Can Co. USA Inc. v. Monsanto Co.,
20 USPQ 2d 1746, 1752 (Fed Cir. 1991).

The Office Action rejected Claim 1 as being anticipated by the *Harada et al.* (U.S. Patent No. 6,739,303). Specifically, the Office Action noted the teaching of the damper spring 11 and the reel 5 with air passages 5-1.

Referring to Figure 1 of the *Harada et al.* disclosure, a spiral power spring 11 is mounted in a spring case 12. The spring case has an air inlet port 12-1. It is approximately positioned adjacent to the inlet port 5-1 in reel 5. See Column 4, Lines 20-32.

As noted on Column 4, Line 6, through Column 5, Line 5, when the rope 6 is pulled, the power storage spiral spring is brought into rotation. However, it is unable to rotate the cylinder cam until a certain amount of power is stored. When sufficient power is stored, the spring (11) will rotate the cylinder cam (3), causing the engine to be activated. As can be appreciated, the power spring (11) is positioned within the spring case (12) and extends across the air inlet port (12-1).

That is, the spiral spring (11) spirally extends from the inner end engage of the groove (3-1) formed in the cylinder cam (3) to the outer end thereof and is engaged with the projection (12-2) of the spring case (12), as shown in Figure 4. Thus, the spiral spring (11) has portions transversely extending across the air inlet port (5-1) of the reel (5) and the air inlet port (12-1) of the spring case (12). Portions of the spiral spring constitute a resistance to the passage of the cooling air flowing towards the engine.

The present invention uses a damper spring (13) formed in the shape of a torsion coil spring and disposed within annual recesses (11, 12) which are formed in the boss portion (4b) of the rope reel (4) and the cam (7), respectively. The boss portion (4b) of the rope reel (4) terminates at the radial inner edges of the air passages (21) and has an outer wall which forms the annual recess (11). The outer diameter of the outer wall is smaller than the boss portion. The cam (7) has an outer diameter smaller than that of the boss portion (4b) of the rope reel (4). Thus, the damper spring (13) is not situated in a passage through which the cooling air flows towards the engine.

Thus, the rope reel air passages are located radially outward from the torsion coil spring to provide an open passageway free from any intrusion by the torsion coil spring.

Additionally, the casing has an outer convex surface with an inclined annular flange extending from the side wall with ventilation air inlets (19) formed on the annular flange to provide additional air passageways. These features are set forth in our amended claims.

The Office Action further cited the *Harada et al.* (Japanese Laid-Open Application 2003-97397). As the Examiner is aware, this reference is not earlier than the present priority date. A close review of the disclosure, however, shows that this reference also uses a similar arrangement of a spiral spring (11) and air passageways (12-1) along with air passageways (5-1) in the rope reel (5). It would appear that this teaching is the same as the *Harada et al.* teaching relied upon in the '303 U.S. patent. Thus, there is no necessity to file an English translation of our certified priority document.

Claim 1 has been amended to define the respective positions of the air passageways relative to a damper spring which is in the form of a torsion coil spring.

New dependent Claims 3 and 4 add additional novel features. Claim 5 represents the indicated allowed subject matter, while Claim 6 provides an alternative definition as supported by the above arguments and the present specification and drawings.

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If the Examiner believes that a telephone interview will help further the prosecution of this case, he is respectfully requested to contact the undersigned attorney at the listed telephone number.

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on April 4, 2005.

By: Rachel Carter

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Signature

Dated: April 4, 2005

Very truly yours,

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